

A new locality for *Litoria brevipalmata* (Anura: Pelodyadidae) from South East Queensland

BY G. V. CZECHURA*

Introduction

McDonald (1974) recorded the presence in Queensland of *Litoria brevipalmata* Tyler, Martin and Watson. This record was based on the collection of two specimens, separately obtained, from Crows Nest National Park (N.P. 629; 152° 06'E, 27° 15'S) and Ravensbourne National Park (N.P. 492; 152° 12'E, 27° 21'S).

The recent collection of three specimens of this frog near Jimna (152° 27'E, 26° 39'S) therefore constitutes both an extension of range and a new locality for this frog in south-east Queensland.

Observations and Locality Data

Observations took place on the night of Sunday, 29 January, 1978. Heavy, intermittent showers resulting in the formation of many standing pools of water and moist substrate, were prevailing at the time. All frogs were collected in an area approximately 6 kilometres north-west from the township of Jimna, south-east Queensland.

The first individual was found near the gutter of an unsealed roadway. A search of the area for more specimens was immediately undertaken. This search resulted in the capture of the additional two specimens some 30 metres distant. This latter area was in the vicinity of a small creek, and supported extensive regrowth of the grass *Imperata cylindrica*. Grassy regrowth was restricted to small, short (3-4 cm height) clumps separated by areas of bare ground; both frogs were sitting on these patches of moist, bare earth. In addition another four frogs were located (but not collected) in similar situations here.

Subsequently, a single individual was observed near a small pond in a gravel quarry

some 4 km north-west of Jimna. All frogs observed were males in breeding condition.

Table 1 presents a list of synchronosympatric frog species for both locations.

The vegetation present in the area from which the specimens were collected consisted of low, dry sclerophyll forest with a well developed grassy layer. The tree layer consisted of young *Eucalyptus* spp. and *Casuarina* sp. The dominant grass being the aforementioned *Imperata cylindrica*. Small patches of vine scrub (= low closed forest) with *Eucalyptus* spp. and *Tristania conferta* as dominant emergents, were also present in the vicinity.

The vegetation surrounding the gravel quarry was essentially similar to the former area. However, the dry sclerophyll forest appeared to have both a greater density and higher percentage of more mature trees, resulting in a taller tree stratum plus a reduced grassy layer. Adjoining the open forest were, again, areas of vine scrub.

TABLE 1. Synchronosympatric frog species with *Litoria brevipalmata* Jimna area, SE.Q.

<i>Litoria caerulea</i>
<i>Litoria chloris</i>
<i>Litoria gracilentia</i>
<i>Litoria dentata</i>
<i>Litoria latopalmata</i>
<i>Litoria lesueuri</i>
<i>Adelotus brevis</i>
<i>Pseudophryne bibroni</i>
<i>Uperoleia marmorata</i>
<i>Limnodynastes ornatus</i>
<i>Limnodynastes terraereginae</i>
<i>Mixophyes fasciolatus</i>

Call

Barker and Grigg (1977, p. 64) report the

*Wootha Road, Maleny, Queensland

call of *Litoria brevipalmata* as a "series of short quacking notes". Calls which may be described in this manner were heard at the collection site; in one case, a *L. brevipalmata* was found near the point of origin of such a call.

In captivity, the three individuals have been heard making soft, clucking noises similar to a very slow and harsh *L. latopalmata* call.

Discussion

L. brevipalmata is easily distinguished from all sympatric frogs on the basis of the lime-green and black thigh, groin and axillary colouration in addition to the features reported in the original definition (Tyler, Martin and Watson, 1972, p. 82). Cogger (1975) and Barker and Grigg (1977) have previously indicated the importance of the presence of the lime-green colouration for field identification.

The presence of *L. brevipalmata* in the Jimna area is an extension of some 80 kilometres north from the previously recorded locations. The Jimna area is included within the Conondale Range complex of south-east Queensland. Czechura (1975, 1976) has previously reported on the rainforest/wet sclerophyll dependent herpetofauna of this area.

L. brevipalmata, however, seems to be a representative of an interesting "dry" forest adapted fauna which reaches its greatest development in the drier country north of the rainforest/wet sclerophyll areas previously studied. Here the rainforests and wet sclerophyll forests are replaced in dry vine scrubs and open, dry sclerophyll forest re-

spectively. Very few typically rainforest forms frequent the vine scrub formations (one exception being the agamid lizard *Gonocephalus spinipes*). Frequently the rainforest/wet sclerophyll herpetofauna are replaced by a congener in this area, (the snakes *Hoplocephalus stephensi* and *H. bitorquatus* respectively) or are restricted to gallery forest (e.g. *Litoria pearsoniana*).

On the whole, composition of the "wet" and "dry" adapted faunas is quite dissimilar; differences reflected on the generic as well as the specific level. For example, *Litoria dentata*, *L. brevipalmata*, the macropods *Aepyprymnus rufescens*, *Petrogale penicillata* and *Macropus dorsalis* all lack close relatives in the "wet" development.

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Note on Aboriginal wooden vessel called tarnuk bullito or tarnuk bullarto

Dr. L. A. Hercus has kindly pointed out that bullito, bullarto means 'big' and is found in sev-

eral aboriginal vocabularies of the Melbourne area. See *Vic.Nat.*, 95:54.

Editor.